Benefits of Flexibility in Decision Documents and Ground Water Monitoring Plans

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Overview

- Purpose: Highlight Need for Integrating Flexibility into Sampling Plans to Ease Implementation of LTMO
- Will Cover:
 - Benefits of Flexibility in LTM Program
 - Documents Relevant to LTM Decisions
 - Exit Strategies, Documentation of LTM Objectives, and Modification Logic
 - Incorporation into Decision Documents and Sampling and Analysis Plans



Benefits of Flexibility

- Optimization is Change
 - Increase or Decrease in Locations, Frequency,
 Analytical Requirements
- Recurring Process
 - Conditions Change as Remedy Progresses, Land Use Changes, Climate Varies, etc.
- Different Documents May Address or Describe LTM Program
 - Some are Easier to Modify than Others
 - Some Have Legal Ramifications



Benefits of Flexibility, Continued

- Avoid Costs and Save Time if Changes Resulting from LTMO Can be Incorporated Easily
- Address LTMO in Documents That are Readily Modified, Defer Issue or Describe Process in Ones that Aren't



Documents Relevant to LTMO Implementation

- Decision Documents: Difficult to Change
 - Records of Decision
 - RCRA Permits
 - California-Specific (and other States)
- Court Orders, etc.:Difficult to Change
- Remedial Action/Corrective Action Plans Somewhat Difficult to Modify
- Sampling and Analysis Plans: Easy to Modify and Update (e.g., Addendums)
- Operation & Maintenance Plans: Easy to Modify



Exit Strategy and LTM Approach

- Exit Strategy: "[A] plan to actively manage the site and make decisions at various points that will best tailor the remediation and monitoring efforts to achieve the RA objectives in the most efficient and effective manner." (ITRC RPO TechReg Document, 2004)
- Decisions Addressed include:
 - Remove or Add Additional Remediation Components (e.g., Extraction Wells)
 - When to Change Remedial/Corrective Action Technologies
 - When to Cease Active Remediation
 - Approach to Revisiting LTM Program to Provide Data Needed for These Decision as Remediation Progresses



Exit Strategy and LTM Approach, Continued

- Formal Document and Flow Charts (Part of Decision Document?)
- Stakeholder Input and Acceptance
- Documents Objectives of Remediation and LTM



Incorporating LTMO into Decision Documents and Sampling Plans

- Decision Documents
 - Acknowledge Need for Periodic Assessment and Adjustment of LTM
 - Possibly Incorporate LTMO Strategy into Document or Cite Required Preparation of Formal Exit Strategy or LTM Strategy
 - Do not Specify LTM Program Details



Incorporating LTMO into Decision Documents and Sampling Plans, Continued

Project Plans

- Use DQO/Technical Project Planning Process
- Clearly State LTM Objectives, Current LTM Program
- Explain Process for Periodic Optimization and Addendum Preparation (Network, Frequency, Analytical)
- Identify Responsibilities, How Data Managed for Decisions
- Can be in Sampling & Analysis Plan, O&M Plan, etc,



Summary

- More Flexibility in Sampling Plans and Other Documents Makes it Easier to Implement LTMO
- We Covered:
 - Benefits of Flexibility in LTM Program
 - Documents Relevant to LTM Decisions
 - Exit Strategies, Documentation of LTM Objectives, and Modification Logic
 - Incorporation into Decision Documents and Sampling and Analysis Plans

